

INTERNATIONAL SEARCH REPORT

International Application No.

PC/DE 03/04286

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L21/762 H01L27/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 328 331 A (TOKYO SHIBAURA ELECTRIC CO) 16 August 1989 (1989-08-16)	10-18
Y	the whole document column 7, line 12 - line 35 figure 5	1-9
X	US 5 909 626 A (KOBAYASHI KENYA) 1 June 1999 (1999-06-01)	10-18
Y	column 6, line 19 - column 9, line 20 figures 1, 3, 5	1-9
X	US 5 356 827 A (OHOKA TSUKASA) 18 October 1994 (1994-10-18)	10-18
Y	column 2, line 49 - column 4, line 54 figure 1	1-9
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *Z* document member of the same patent family

Date of the actual completion of the international search

21 July 2004

Date of mailing of the international search report

28/07/2004

Name and mailing address of the ISA

European Patent Office, P.O. 5616 Patentkan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax. (+31-70) 340-3016

Authorized officer

Bernabé Prieto, A

INTERNATIONAL SEARCH REPORT

International Application No.

T/DE 03/04286

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	YU OHATE ET AL: "DIELECTRICALLY ISOLATED INTELLIGENT POWER SWITCH" PROCEEDINGS OF THE CUSTOM INTEGRATED CIRCUITS CONFERENCE. PORTLAND, MAY 4 - 7, 1987, NEW YORK, IEEE, US, vol. CONF. 9, 4 May 1987 (1987-05-04), pages 443-446, XP000011869 figure 4	10-18
Y	US 6 229 179 B1 (JANG SIN-KOOK ET AL) 8 May 2001 (2001-05-08) column 6, line 35 - column 8, line 27; figure 3	1,2,4-9
Y	EP 1 267 414 A (MITSUBISHI ELECTRIC CORP) 18 December 2002 (2002-12-18) figures 44,54,60,66	3

INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No

I/DE 03/04286

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0328331	A	16-08-1989	DE	68929504 D1	15-01-2004
			EP	0328331 A2	16-08-1989
			EP	0721211 A2	10-07-1996
			JP	2168646 A	28-06-1990
			JP	2788269 B2	20-08-1998
			KR	9203442 B1	01-05-1992
			US	5688702 A	18-11-1997
			US	5512774 A	30-04-1996
			US	5049968 A	17-09-1991
			US	5072287 A	10-12-1991
			US	5097314 A	17-03-1992
			US	5332920 A	26-07-1994
US 5909626	A	01-06-1999	NONE		
US 5356827	A	18-10-1994	JP	3014012 B2	28-02-2000
			JP	5267439 A	15-10-1993
US 6229179	B1	08-05-2001	KR	2000027734 A	15-05-2000
			TW	441110 B	16-06-2001
EP 1267414	A	18-12-2002	JP	3299374 B2	08-07-2002
			JP	7235664 A	05-09-1995
			EP	1267414 A2	18-12-2002
			DE	69530633 D1	12-06-2003
			DE	69530633 T2	26-02-2004
			EP	0669659 A2	30-08-1995
			US	5637886 A	10-06-1997